



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,545	01/31/2001	Leslie M. Brooks	2479.1078-000	3228
21005	7590	10/18/2006	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			PHILLIPS, HASSAN A	
		ART UNIT	PAPER NUMBER	
			2151	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

MAILED

OCT 18 2006

Technology Center 2100

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/774,545

Filing Date: January 31, 2001

Appellant(s): BROOKS ET AL.

Mark B. Solomon (44,348)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed July 13, 2006, appealing from the Office action mailed January 9, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,838,927	GILLON	11-1998
5,555,377	CHRISTENSEN	9-1996

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-31, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillon in view of Christensen.

In considering claims 1, 13, 25, and 28, Gillon discloses a computer-readable medium, an apparatus, and a method for compressing a data stream comprising: filtering protocol-specific header and control information of a protocol data unit (PDU) to determine compressibility of the contents of the PDU, (col. 5, lines 48-50); based on the result of filtering, selecting a state of data link compression for the PDU to optimize compression efficiency, (col. 5, lines 52-56); and associating the selected state of data link compression with the protocol data unit to enable a compression process adapted to compress protocol data units in an adaptive manner, (col. 2, lines 21-31).

Although the teachings of Gillon show substantial features of the claimed invention, they fail to expressly show: disabling a compression process.

Nevertheless, it was well known in the art at the time of the present invention that having the ability to enable a compression process to optimize compression efficiency also suggests having the ability to disable a compression process to optimize compression efficiency. This is better exemplified in the teachings of Christensen. More specifically, Christen teaches: enabling or disabling a compression process adapted to compress protocol data units in an adaptive manner for optimizing compression efficiency, (col. 2, lines 1-18).

Thus, if not implicit in the teachings of Gillon, given the teachings of Christensen it would have been obvious to one of ordinary skill in the art to modify the teachings of Gillon to show disabling the compression process. This would have clearly demonstrated advantages for efficiently utilizing a compression algorithm only when needed, Christensen, col. 2, lines 12-18.

In considering claims 2, 14, and 26, the method of Gillon teaches compressing the contents of the PDU as a function of the state of data link compression. See col. 5, lines 52-56.

In considering claims 3 and 15, although the disclosed method of Gillon shows substantial features of the claimed invention, it fails to expressly disclose: indicating whether the contents of the PDU have been compressed or not.

Nevertheless, in a similar field of endeavor Christensen teaches a method for adaptive compression comprising: applying an indication in a compressed PDU to indicate whether the contents of the PDU have been compressed, (col. 5, lines 54-61).

Given the teachings of Christensen, it would have been obvious to one of ordinary skill in the art to modify the teachings of Gillon to also teach a means of indicating whether contents of a compressed PDU have been compressed by applying an indication in, or with, the compressed PDU. This would have provided an efficient means for the device assigned to decompress the PDU to determine whether decompression is necessary or not, Christensen, col. 5, lines 49-53.

In considering claims 4, 16, and 27, Gillon further discloses decompressing the compressed contents of the PDU, col. 5, lines 13-17.

In considering claims 5 and 17, the combined methods taught by Gillon and Christensen with respect to claims 3, 4, 15, and 16, provide a means for decompressing the compressed contents of a PDU in a pre-negotiated manner based on the indication of whether the contents of the PDU have been compressed.

In considering claims 6 and 18, it is implicit in the method taught by Gillon that a table is accessed having entries with specific media types deemed compression limited. See col. 5, lines 39-50.

In considering claims 7 and 19, it is also implicit in the method taught by Gillon that filtering includes associating individual PDU's to specific media types. See col. 5, lines 48-56.

In considering claims 8 and 20, the method of Gillon teaches determining if a given PDU is associated with a previously filtered PDU, and, if so, assigning the same state of data link compression for the given PDU as for the previously filtered PDU. See col. 5, lines 48-57.

In considering claims 9 and 21, it is implicit in the method taught by Gillon that a table is accessed including information of previously filtered PDU's, when determining if a given PDU is associated with a previously filtered PDU. See col. 5, lines 48-56.

In considering claims 10 and 22, it is also implicit in the method taught by Gillon that data link compression is disabled if the compressibility of the contents of the PDU is determined to be low. See col. 5, lines 48-56.

In considering claims 11 and 23, the method of Gillon teaches enabling data link compression if the compressibility of the contents of the PDU is determined to be high. See col. 5, lines 48-56.

In considering claims 12 and 24, the method of Gillon further teaches utilizing tables initialized with patterns expected to be contained in the content of the PDU, and used by the data link compression. See col. 5, lines 33-38.

In considering claim 29, Gillon discloses a method for optimizing compression efficiency comprising: filtering protocol-specific header and control information of a protocol data unit (PDU) to determine compressibility of the contents of the PDU, (col. 5, lines 48-50); based on the result of filtering, selecting a state of data link compression for the PDU to optimize compression efficiency, (col. 5, lines 52-56).

Although the teachings of Gillon show substantial features of the claimed invention, they fail to show: selectively controlling a state of a compression algorithm.

Nevertheless, Christensen teaches: without changes to a subordinate protocol layer, or changes to higher protocol layers that the subordinate protocol layer carries, selectively controlling the state of a compression algorithm for compressing data transported by PDU'S across a connection in a data communication network to optimize the compression efficiency, (col. 2, lines 1-18).

Thus, given the teachings of Christensen, it would have been obvious to one of ordinary skill in the art to modify the teachings of Gillon to show, without changes to a subordinate protocol layer or changes to the higher protocol layers it carries, selectively controlling the state of a compression algorithm based on a protocol-specific header and control information of a protocol data unit to determine compressibility for compressing data transported by protocol data units across a connection in the data

communication network to optimize the compression efficiency. This would have advantageously provided an efficient means for using a compression algorithm only when needed, Christensen, col. 2, lines 12-18.

In considering claim 30, the method of Christensen discloses selectively controlling the state of the compression algorithm by enabling or disabling the compression algorithm. See col. 2, lines 1-12. One of ordinary skill in the art would modify Gillon with Christensen for the same reasons indicated in consideration of claim 29.

In considering claim 31, Gillon teaches controlling the state of compression by analyzing protocol-specific header and control information of the PDU'S of the higher protocol layers. See col. 5, lines 39-50.

(10) Response to Argument

With regards to claims 1-31, appellant's argue in section D, pages 9-12, that: a combination of Gillon and Christensen does not meet basic requirements of *prima facie* case of obviousness.

In response to appellant's remarks with regards to claims 1-33, as indicated in the previous actions, examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, examiner maintains it was well known in the art at the time of the present invention, and thus knowledge generally available to one of ordinary skill in the art, that having the ability to enable a compression process to optimize compression efficiency also suggests having the ability to disable a compression process to optimize compression efficiency. In this regard, the teachings of Christensen were merely used to disclose such well known teachings. More specifically, the teachings of Christensen disclose: enabling or disabling a compression process adapted to compress protocol data units in an adaptive manner for optimizing compression efficiency, (col. 2, lines 1-18). If not implicit in the teachings of Gillon, examiner maintains given the teachings of Christensen it would have been obvious to one of ordinary skill in the art to modify the teachings of Gillon to show disabling the compression process for the purpose of clearly demonstrating the advantages of efficiently utilizing a compression algorithm only when needed, (Christensen, col. 2, lines 12-18).

Further, although the teachings of Christensen were used merely to show functionality, they were not necessarily needed to read on appellant's claimed invention. As mentioned in previous actions the teachings of Gillon clearly suggest disabling the

compression, at the least, when reading in light of appellant's specification. Page 3, lines 1-6 of Appellant's specification recites:

"By monitoring the data type of data streams, an Internet router, for example, employing the principles of the present invention, can make intelligent guesses as to which data streams are compressible. As a result of such a guess, the Internet router can enable and disable a compression process, thereby compressing different streams of data in an adaptive manner. By adaptively enabling compression, the associated dictionary maintains data patterns that keep the compression process efficient."

Similar teachings for employing enabling or disabling are found throughout Appellant's specification, (i.e. page 7, lines 1 1-17).

Similar to Appellant's claimed invention, Gillon also teaches monitoring the data type of data streams, making an intelligent guess as to which data streams are compressible, and as a result of the guess, deciding whether or not to compress the stream of data (col. 2, lines 21-31 , col: 5, lines 48-57). Thus, Examiner maintains that in light of appellant's specification, in the teachings of Gillon, the decision to compress the stream of data, or to not compress the steam of data, is a clear suggestion of enabling or disabling the compression as claimed by the Appellant.

Still further, examiner submits that giving broadest reasonable interpretation to appellant's claimed invention, there is no need for Gillon to teach appellant's claimed "disable a compression process adapted to compress protocol data units in an adaptive manner" since it is referred to in the alternative in appellant's claim language (i.e. appellant's claims similarly recite: "associating the selected state of data link compression with the protocol data unit to enable or disable a compression process...").

As mentioned in previous actions, examiner has interpreted the claim language as broadly as possible. It is also the examiner's position that appellant has not yet submitted claims drawn to limitations, which define the operation and apparatus of appellant's disclosed invention in a manner that distinguishes over the prior art. Failure for appellant to significantly narrow definition/scope of the claims implies the appellant intends broad interpretation be given to the claims. The examiner has interpreted the claims with scope parallel to the appellant in the response and reiterated the need for appellant to define the claimed invention more clearly and distinctly.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

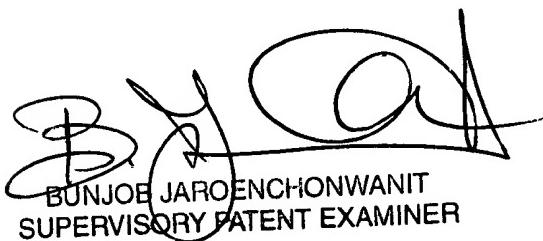
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

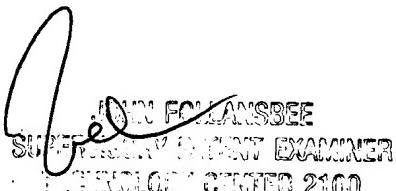


Hassan Phillips

Conferees:



BUNJOE JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER



ALAN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TELELOGY CENTER 2100